

warm-up

Write your homework in your planner. Get calculators.

1. A scientist catches and tags 50 fish in a pond. She returns a year later and catches a sample of 73 fish, and counts 18 tagged fish. Based on this sample, how many fish can she predict are in the pond?

2. A garden is 13 ft. wide by 2 ft. long. If the width is doubled and the length is tripled...

(a) What is the perimeter of the new garden?

(b) What is the area of the new garden?

3. What is 12.5% of 500? Explain how you got your answer.

Fast forward 4 years...you're now in 11th grade and know that you need to start saving for PROM!! It can be very expensive, so you decide to get a job. Here are the classifieds in this week's paper...



CLASSIFIEDS



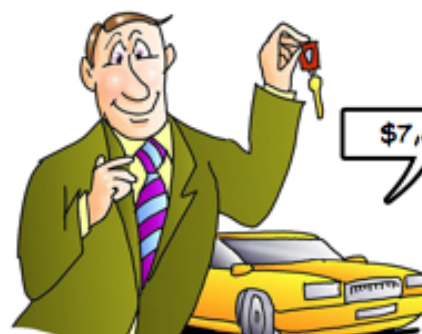
AGENT FOR YOUR FRIEND'S BAND

WE'LL PAY YOU 20% OF THE MONEY FROM OUR SHOWS! WE PLAY 3 SHOWS PER MONTH AND MAKE \$850 AT EACH SHOW.



CAR SALESMAN

WE'LL GIVE YOU 5% OF THE PROFIT FOR EVERY CAR YOU SELL! MOST NEW EMPLOYEES SELL ABOUT 2 CARS PER MONTH.



I SOLD \$2,000 IN CLOTHES LAST MONTH!

I SOLD \$1,800 IN CLOTHES LAST MONTH



Job offer:

Earn 40% commission on all clothes sold!

sous-chef for a new restaurant

We'll offer you a \$100 signing bonus! Then, we'll pay you a salary of \$15 per hour, working 48 hours per month.



SURPRISE! YOUR PARENTS TELL YOU THAT THEY HAD PUT \$5,000 IN A SAVINGS BOND WHEN YOU WERE BORN (12 YEARS AGO). IT HAS BEEN EARNING 8% IN INTEREST EVERY YEAR. WILL THE BALANCE BE MORE OR LESS THAN WHAT YOU WOULD EARN AT THE JOB YOU CHOSE? (USE THE FORMULA $I = PRT$ TO CALCULATE THE INTEREST!)

WHAT DOES THIS SAY ABOUT SAVINGS ACCOUNTS - ARE THEY WORTHWHILE?

Which one do you think would make the most money?



Move the "\$" to your prediction!

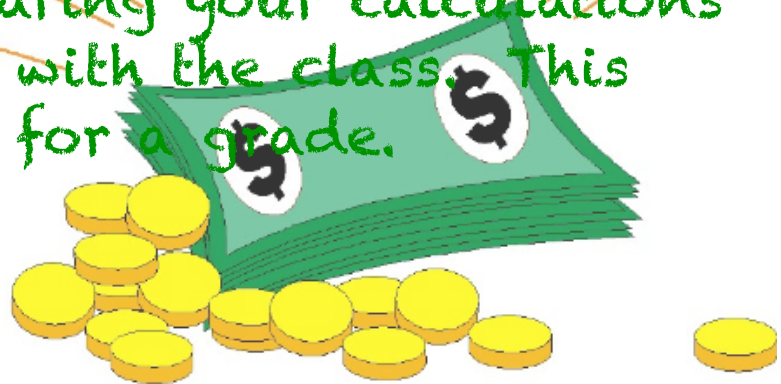
Agent	Car Salesman	Boutique Salesperson	Sous-Chef	Savings Account

1. Calculate how much you will **ACTUALLY** earn based on the numbers provided.

2. Decide which job you want to apply for. Defend your answer using mathematics! Be sure to include:

- >Introduction (Which did you choose?)
- >Details (Explanation - why/why not choose each job?)
- >Conclusion (Summarize.)

3. You will be sharing your calculations AND your choices with the class. This will be turned in for a grade.



Vocabulary Review

Match each word with it's definition.

Commission

Interest

Discount

Gratuities

Profit

Mark-up

	A gift or reward, usually of money, for services; tip
	A charge for a loan, usually a percentage of the amount loaned. Calculated using the formula $I = prt$.
	A percentage or amount added to the cost to provide the seller with a profit
	A fee or percentage given to a sales representative or an agent for their services.
	To deduct or subtract from a cost or price.
	The money received after all operating expenses have been paid.

Exit Ticket

(USE A PROPORTION FOR ALL OF THESE.)

1. What is 42% of 150?
2. 60 is what percent of 110?
3. A sweater is on sale for 30% off. If it originally cost \$25, what is the sale price?

